120

QC8- Inspect parts - second check

QC

Memo

**Quality Control** 

										DQA:	Date:	
NCR: Y	es / No	o			WORK ORDER NON-C	CON	VFORM	MANCE / UP		QA Closed:	Date:	
						-						
Work Orde	er:				DISPOSITION	ı			AGAINST DE	PARTMENT,	PROCESS	
			<del></del>		Rework	1 <b>I</b>		Skid-tube	Crosstube		Water Jet	Engineering
Part N	10.				Scrap	1	ſ	Machining	Small Fab	Pro	d. Eng. Coor.	Quality
					Use-as-is		Therm	noforming	Finishing	Rec/Stor	e/Packaging	Other
NCR N	10				Work Order Update	]	:	Large Fab	Composite		Supplier	
		7		1 5						C: 0		1
Root	Dot	Cton	0+1/	}	iption of work order update		nitial ief Eng		tion ription	Sign & Date	Verification	QC Inspector
Cause	Date	Step	Qty		or Non-conformance	Cil	iei ciig	Desc	приоп	Date	verincation	QC Inspector
Doc/Data												G.
Equip/Tooling Operator											1	
Material											11	
Setup												
Other												
Process												
Supplier												
Training		ì				1						
Unapproved				}								
				-	F.	AUL	T CATE	GORY				
Landi	ng Gear				General		_			_	_	_
	Bendir	g			Bend		Grain			Ovalized	_	Pressure/Forced
	Centre	Not Conce	ntric to	o/s	BOM/Route	Ш	Hardwa	re		Over/Under	tolerance	Temperature/Cure
	Cracks				Broken/Damaged		Inspecti	ion Incomplete		Part Incorre	ct	Weld
	Crushe	d/Crimped			Burrs	_	•	ions Incomplete/	'Unclear	Part Lost/M	issing	Wrong Stock Pulled
	Cuffs				Contamination	_	Mainte			Part Moved		
	Heat T	reat		L	Countersink	Ш	Mislabe	eled		Positioned V	_	_
		tion Strip ir	1 Tube		Cut Too Short	_	Misread	t		Power Loss/	Surge	Other
	Ripple	s in Bend		1	Drill Holes		Offset				-	

Out of Calibration

Out of Sequence

Outside Dimensions

Turning Sequence

Wave/Twist in Tube

Torque Waves in Extrusion

Drill Holes Drawing

Finish

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

Work Orde				Page 2						
Revision ID:	D3246-041 Mounting Bra	ucket		Accept	*N900	04010	<b>೧</b> *	Setup	Start Stop	*NS1* *NS2*
	10/29/12	Start Qty: 6.00 Req'd Qty: 6.00	*6* *6*		Cust Item I Customer:	ID:				14.72
Approvals:		an:				ate:ate:	-	Run	Start Stop	*NR1* *NR2*
Sequence ID/ Work Center II 130 *130* Brake NC	)	Operation Description  NC BRAKE Memo		Set Up/ Run Hours 0.00	Tool ID	Tool # Plan Code	Accept Qty	Rejo		Reject Insp. Number Stamp
Brake NC			as per Dwg D3246C'sinl	k as per Dwg D3246			D			J 0411
*140 *140* QC Quality Control		QC5- Inspect part compl	eteness to step on W/O	0.00 Sm/5 0.00 12 12 19	í		8			
150 *150*		Chemical Conversion Co	pat per QSI005 4.1	0.00			G	_	Æ,	12-12-19
HandFinish		Memo		0.00						

Memo

Hand Finishing

NCR: Y	es / No				WORK ORDER NON-C	CON	IFORM	MANCE / UP	DATE			
										QA Closed:	Date:	
Work Orde	er:				DISPOSITION				AGAINST D	EPARTMENT,	PROCESS	
Part N	lo				Rework Scrap Use-as-is		1	Skid-tube Machining noforming	Crosstube Small Fab Finishing	→ **	Water Jet d. Eng. Coor. e/Packaging	Engineering Quality Other
NCR N	lo				Work Order Update	]		Large Fab	Composite	]	Supplier	
Root		I		Descri	ption of work order update		nitial	Ac	tion	Sign &	· - · · · · · · · · · · · · · · · · · ·	
Cause	Date	Step	Qty		or Non-conformance	Ch	ief Eng	Desc	ription	Date	Verification	QC Inspector
Doc/Data												
Equip/Tooling												
Operator												****
Material												
Setup						1		•			٠	
Other								Ì				
Process	_							1				
Supplier		1										
Training												
Unapproved								<u> </u>				1
						AUL	T CATE	GORY				
Landir	ng Gear			-	General		٠ .		Г	٦		7
	Bending				Bend	$\vdash$	Grain		<u> </u>	Ovalized	_	Pressure/Forced
	Centre N	ot Conce	ntric to (	<sup>O/S</sup>	BOM/Route	$\vdash$	Hardwa		-	Over/Under	<u> </u>	Temperature/Cure
	Cracks			<u> </u>	Broken/Damaged	$\vdash$		ion Incomplete	<u> </u>	Part Incorre	<del>-</del>	Weld
	Crushed/	'Crimped		-	Burrs	-		tions Incomplete/	Unclear	Part Lost/M	ssing	Wrong Stock Pulled
	Cuffs			.	Contamination	$\vdash$	Mainte		_	Part Moved		
	Heat Tre		<b>-</b> .	_	Countersink	-	Mislabe		_	Positioned V		٦٠٠٠
	Inspection		Tube	-	Cut Too Short	-	Misread	d		Power Loss/	Surge	Other
	Ripples in			<u> </u>	Drill Holes	$\vdash$	Offset	o 1:1				
	Torque V	vaves in E	xtrusio	1	Drawing		Out of (	Calibration				

Out of Sequence

Outside Dimensions

DQA:

Date:

Turning Sequence

Wave/Twist in Tube

Finish

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

Work Orde					<b></b>	*924	15*							Page 3	
Revision ID: Item Name:	D3246-041 Mounting Bra		The second secon			Accept	*N900		100	* s	etup	Start Stop	*N: *N:	S1* S2*	
Start Date: Required Date: Reference:	10/29/12 11/09/12	Start Qty: Req'd Qty:			*6* *6*		Cust Item I Customer:	D:							
Approvals:		an:				Tooling: SPC (Y/N):		nte:		R	un	Start Stop	*N  *N	₹1* ₹2*	
Sequence ID/ Work Center ID  160 *160* QC Quality Control	)	Operation Description QC3- Inspect Pa	art Finish emo		:	Set Up/ Run Hours 0.00	Tool ID	Tool #	Plan Code	Accept Qty	Rej Qty		Reject Number	Insp. Stamp	- /ez
*170* Small Fab Small Fab	w)		e <b>mo</b> tall Nut Pla	ates as per	Dwg D3246	0.00				8<				J.	/ 2/10
*180 *180* QC Quality Control	7	QC5- Inspect p.	art complet	eness to st	ep on W/O	0.00 PAS 15, 0.00 12 12 3	0		,	8			*		

											DQA:	Date:	
NCR: Y	'es	/ No				WORK ORDER NON-	COI	NFORN	MANCE / UP	DATE	QA Closed:	Date	
Mark Orda						DISPOSITION				AGAINST DE	-	/PROCESS	
Work Orde  Part N  NCR N	lo.				· ·	Rework Scrap Use-as-is Work Order Update		Machining Small Fab Thermoforming Finishing		Crosstube Small Fab Finishing Composite	Water J Prod. Eng. Coo Rec/Store/Packagi Suppli		Engineering Quality Other
NCK	-						ا ل		-		J	эцррист	
Root						ption of work order update	1	nitial		tion	Sign &		
Cause		Date	Step	Qty	(	or Non-conformance	Ch	ief Eng	Desc	ription	Date	Verification	QC Inspector
Doc/Data	4												
Equip/Tooling	_	:	:										
Operator -			į	*		9							
Material													`
Setup	_												
Other	_				,								
Process	_												
Supplier	_												
Training	$\dashv$												
Unapproved			<u> </u>	<u> </u>				T CATE	CORY			<u> </u>	
						·····	AUI	T CATE	GURY				
Landii						<b>General</b> Bend		Grain			Ovalized		Pressure/Forced
		Bending	• Camaa		o/s	BOM/Route	-	Hardwa	ro.	-	Over/Under	toloranco	Temperature/Cure
	_	Centre No Cracks	or Concei	ntric to	<sup>U/3</sup>  -	Broken/Damaged	$\vdash$	4	ion Incomplete	<del>                                     </del>	Part Incorre	<del> </del>	Weld
	-	Crushed/	Crimpod			Burrs	$\vdash$	4	ion incomplete/	/Unclear	Part Lost/M	<b>⊢</b>	Wrong Stock Pulled
	_	Cuffs	crimpeu		-	Contamination	-	Mainte	•	Officieal	Part Moved	· ·	
	-	Heat Trea	ıt.		-	Countersink		Mislabe		-	Positioned \		
	$\vdash$	Inspection		Tube	<b> </b>	Cut Too Short	$\vdash$	Misread			Power Loss	_	Other
G	$\overline{}$	Ripples in		Tube	<u> </u>	Drill Holes	$\vdash$	Offset	4	L	J. 5wci 2033/		Total
	-	Torque W		Extrusio	n	Drawing	-	-{	Calibration			· · · · · · · · · · · · · · · · · · ·	

Out of Sequence

Outside Dimensions

Turning Sequence

Wave/Twist in Tube

Finish

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

QC:

*924	115*			Page 4
ept	*N900040	1100*	Setup Start	*NS1*
			Stop	*NS2*
	Cust Item ID: Customer:			
ooling:	Date:		Run Start	"NRT"
PC (Y/N):	Date:		Stop	*NR2*
Set Up/ Run Hours	Tool ID Tool #	Plan Acce Code Qty	ept Reject Qty	Reject Insp. Number Stamp
0.00		Sx		12/12/20
				/ /
				, , , ,

200 \*200\*

Reference:

Approvals:

Sequence ID/

\*190\*

Packaging

Packaging

190

Work Center ID

QC21- Final Inspection - Work Order Release

Identify as per dwg & Stock Location: \$\frac{1}{0}35\$

0.00

Accept

Tooling:

SPC (Y/N):

Date: \_\_\_\_\_

Quality Control

Memo

Memo

Process Plan: \_\_\_\_\_ Date: \_\_\_\_

Operation

Description

0.00

13/1/1095 MF 12-12-27

DQA: Date: WORK ORDER NON-CONFORMANCE / UPDATE NCR: Yes / No QA Closed: Date: **AGAINST DEPARTMENT/PROCESS** DISPOSITION Work Order: Crosstube Water Jet Engineering Rework Skid-tube Small Fab Prod. Eng. Coor. Quality Machining Part No. Scrap Other Thermoforming Rec/Store/Packaging Use-as-is Finishing Work Order Update Composite Supplier NCR No. Large Fab Description of work order update Action Sign & Initial Root Chief Eng Description Date Verification QC Inspector Date Step Qty or Non-conformance Cause Doc/Data Equip/Tooling Operator Material Setup Other **Process** 

Unapproved **FAULT CATEGORY Landing Gear** General Pressure/Forced Bend Grain Ovalized Bending Centre Not Concentric to O/S BOM/Route Over/Under tolerance Temperature/Cure Hardware Broken/Damaged Part Incorrect Weld Cracks Inspection Incomplete Crushed/Crimped / Wrong Stock Pulled Burrs Instructions Incomplete/Unclear Part Lost/Missing Part Moved Cuffs Maintenance Contamination Mislabeled Positioned Wrong Heat Treat Countersink Power Loss/Surge Other Inspection Strip in Tube **Cut Too Short** Misread Drill Holes Offset Ripples in Bend Drawing Out of Calibration Torque Waves in Extrusion Turning Sequence Finish Out of Sequence Folio Wave/Twist in Tube **Outside Dimensions** 

Supplier Training

## Picklist Print

October-30-12 12:48:04 PM

Work Order ID:

92415

Parent Item:

D3246-041

Parent Item Name:

Mounting Bracket

**Start Date:** 10/29/12

Required Date: 11/09/12

Start Qty: 6.00

Required Qty: 6.00

Comments:	IPP Rev:A New I	ssue 06-06-22 J	LM										
Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M2024T3S.050 2024-T3 .050 sheet		Purchased	No			170	sf	178.0484	0.3097	1.956	3, B12-	11-4	
				<b>Location</b>		Loc Qty	Lo	c Code			<b>/</b> .		
				MAT022		178.0484204					/&\		
				117	7684	17.8			117	CRY	(O)		
				121	1216	45.6484204						_	
				121	1889	114.6							/ /
MS20426AD3-3 Rivet		Purchased	No			170	Each	19,562.750	8	<sup>48</sup> ∠		12/10	2/19
				Location		Loc Qty	Lo	c Code				/ /	
				ST316		1470							
				119	9109	282			t				
				121	1011	771				<del></del>			
				190	099	417							
				ST333		6250							
•				123	3352	6250							
				ST334		11842.75							

11842.75

122814

										DQA.	Date	·	
NCR: Ye	es / No				WORK ORDER NON-	CON	NFORM	MANCE / UPDATE		QA Closed:	Date	2:	
					DISPOSITION			AGAINST	DE	PARTMENT			- 15
Work Order	ſ:	·				٦				1	\ <b>A</b> /-41-4	7	7
Part No	0.				Rework Scrap Use-as-is	-	ſ	Skid-tube Crosstube  Machining Small Fab  noforming Finishing		1	Water Jet d. Eng. Coor. e/Packaging	Engineering Quality Other	
NCR N	0				Work Order Update			Large Fab Composite			Supplier		
Root				Descri	ption of work order update	П	nitial	Action		Sign &			_
Cause	Date	Step	Qty		or Non-conformance	Ch	ief Eng	Description		Date	Verification	QC Inspector	
Doc/Data													
Equip/Tooling													
Operator										Š			
Material											-		
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Other						-							
Process													
Supplier			ļ										
Training												1	
Unapproved				İ		<u> </u>			***				-
						AUL	T CATE	GORY			<u> </u>		į
Landin	g Gear			_	General	_	7		_	7		_	
	Bending			ļ	Bend		Grain		_	Ovalized	_	Pressure/Forced	
		lot Conce	ntric to	o/s	BOM/Route	_	Hardwa		$\vdash$	Over/Under	-	Temperature/Cur	9
L	Cracks			L	Broken/Damaged		1	ion Incomplete		Part Incorre		Weld	
		/Crimped			Burrs		4	ions Incomplete/Unclear	_	Part Lost/M	issing	Wrong Stock Pulle	}d
Cuffs Contamination				Maintenance Part Moved									

Mislabeled

Out of Calibration

Out of Sequence

Outside Dimensions

Misread

Offset

Positioned Wrong

Power Loss/Surge

Other

Ripples in Bend

Turning Sequence

Wave/Twist in Tube

Heat Treat

Inspection Strip in Tube

Torque Waves in Extrusion

Countersink

Cut Too Short

Drill Holes

Drawing

Finish

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

October-30-12 12:48:04 PM

Work Order ID:

92415

Parent Item:

MS21059L3

D3246-041

Parent Item Name:

Mounting Bracket

**Start Date:** 10/29/12

Required Date: 11/09/12

Start Qty: 6.00

Required Qty: 6.00

227.0000

Nut Plate

•	ruichaseu				4
		<b>Location</b>	Loc Oty	Loc Code	
		302	10		/
		121185	10		
		314	3		
		122452	3		<del> </del>
		ST301	28		
		118614	8		
		119546	20		

No

ST302

ST316

Durchased

M123900 -247 3-24

120308 120833

121444

121524

110

124 13

1

100

10

Each

								DQA:	Date:	
NCR: Yes	s / No			WORK ORDER NON-	CONFORI	MANCE / UF		QA Closed:	Date:	
Work Order:				DISPOSITION		· .	AGAINST DE	PARTMENT	/PROCESS	
Part No	<u></u>			Rework Scrap	<b>-</b> 1	Skid-tube Machining	Crosstube Small Fab		Water Jet d. Eng. Coor.	Engineering Quality
NCR No	)			Use-as-is Work Order Update	Therr	noforming Large Fab	Finishing Composite	Rec/Sto	re/Packaging Supplier	Other
Root	T			Description of work order update	Initial	A	ction	Sign &		
Cause	Date	Step	Qty	or Non-conformance	Chief Eng	Des	cription	Date	Verification	QC Inspector
Doc/Data							<del></del>			
Equip/Tooling									,	
Operator		]							· 	
Material		Ì								
Setup										
Other										
Process									1	
Supplier										
Training										
Unapproved										
					FAULT CATE	GORY				
Landing	Gear			General						

Bending Bend Grain Pressure/Forced BOM/Route Over/Under tolerance Temperature/Cure Centre Not Concentric to O/S Hardware Broken/Damaged Weld Inspection Incomplete Part Incorrect Cracks Wrong Stock Pulled Crushed/Crimped Burrs Instructions Incomplete/Unclear Part Lost/Missing Maintenance Part Moved Cuffs Contamination Mislabeled Positioned Wrong Heat Treat Countersink Inspection Strip in Tube Cut Too Short Misread Power Loss/Surge Other Offset Ripples in Bend Drill Holes Torque Waves in Extrusion Drawing Out of Calibration Turning Sequence Finish Out of Sequence Wave/Twist in Tube Folio **Outside Dimensions** 

Ovalized

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

DART AEROSPACE LTD	Work Order:	92415
Description: Mounting Bracket	Part Number:	D3246-1
Inspection Dwg: D3246 Rev: A1		Page 1 of 1

## FIRST ARTICLE INSPECTION CHECKLIST

X	First Article		Prototype
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Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
Ø0.098	+0.004/-0.001	699	ر		V B62	
Ø0.250	+0.005/-0.001	.250	2		V	***************************************
11.260	+/-0.010		٤		PROWSOZ	
6.754	+/-0.010	6:749	)		V	
5.677	+/-0.010	5.680	L		v	
2.668	+/-0.010	2.665	,		V	
3.467	+/-0.010	3,464	)			
2.750	+/-0.010	2.749	9		V	
2.370	+/-0.010	2.367	L		V	
0.472	+/-0.010	,472	1		14	
0.359	+/-0.010	359	<b>Y</b>		i,	
0.300	+/-0.010	l ~			V	
0.301	+/-0.010	,308	*		V	
			-			
- 1						
			DAS			

Meas	ured by: เ	ß	Audited by:	Prototype Approval:	N/A
	Date:	12-11-4	Date: 19-1105	Date:	N/A
Rev	Date	Change		Revised by	Approved
A	07.11.23	New Issue	P/O D3246-041	KJ/EC/DD	

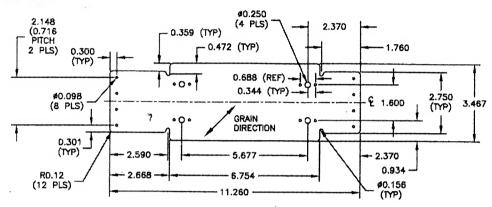




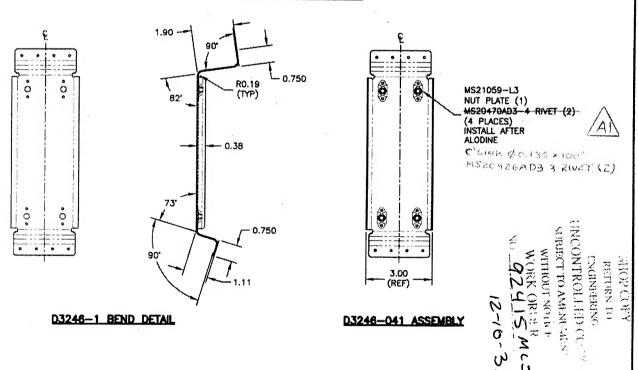


DESIGN	DRAWN BY	DART AEROSPA		
CHECKED	APPROVED	DRAWING NO.		REV. A
e#-	A	D3246	SHEET	1 OF 1
DATE		TITLE		SCALE
04.04.21		MOUNTING BRACKET		1:4
,	2424	t the state of the		





## D3248-1 FLAT PATTERN



## NOTES:

- 1) MATERIAL: 2024-T3 (QQ-A-250/4) 0.050 THICK (REF. DART SPEC. M2024T3S.050)
  2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
  3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
  4) ALL DIMENSIONS ARE IN INCHES
  5) BREAK ALL SHARP EDGES 0.005 TO 0.010

